



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,063	06/20/2001	Masami Kato	35.C15466	1691

5514 7590 06/30/2005

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

PATEL, HARESH N

ART UNIT PAPER NUMBER

2154

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/884,063	Applicant(s) KATO ET AL.	
	Examiner Haresh Patel	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 14-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/25/05</u> | 6) <input type="checkbox"/> Other: _____ |

HL

RD

DETAILED ACTION

1. Claims 1-8 and 14-16 are presented for examination. Claims 9-13 and 17 are cancelled.

Response to Arguments

2. Applicant's arguments filed 3/24/2005 have been fully considered but they are not persuasive. Therefore, rejection of claims 1-8 and 14-16 is maintained.

Applicant argues (1), "the cited reference do not disclose, teach, or suggest the applicant's amended claimed subject matter, constructing a virtual space including a first virtual area to show a condition of each user with image and text and a second virtual area to have a conference for distributing an image among the terminal apparatuses, compressing the image of the user with a quantization coefficient, and controlling the compression with both a first quantization coefficient in accordance with a position of the user in the first virtual area, and a second quantization coefficient smaller than the first quantization coefficient in the second virtual area". The examiner respectfully disagrees in response to applicant's arguments. The limitations regarding, "constructing a virtual space including a first virtual area to show a condition of each user with image and text and a second virtual area to have a conference for distributing an image among the terminal apparatuses, compressing the image of the user with a quantization coefficient, and controlling the compression with both a first quantization coefficient in accordance with a position of the user in the first virtual area, and a second quantization coefficient smaller than the first quantization coefficient in the second virtual area", has been newly added, which is addressed by the new ground(s) of rejection (please refer to the below rejections of this office action). Therefore, the rejection is maintained.

Applicant argues (2), “the cited reference do not disclose, teach, or suggest the applicant’s amended claimed subject matter, control means for controlling image compression means with both a first quantization coefficient in accordance with the position of a user in a first virtual area and a second quantization coefficient smaller than the first quantization coefficient in a second virtual area”. The examiner respectfully disagrees in response to applicant's arguments. The limitations regarding, “controlling image compression means with both a first quantization coefficient in accordance with the position of a user in a first virtual area and a second quantization coefficient smaller than the first quantization coefficient in a second virtual area”, has been newly added, which is addressed by the new ground(s) of rejection (please refer to the below rejections of this office action). Therefore, the rejection is maintained.

Priority

3. Applicant was requested in the previous office action to submit the translated priority document in English for the Japan priority papers submitted on 10/03/2001 (i.e., Japan 2000-187794 06/22/2000 application) for verification, in order to benefit the effective date as 06/22/2000. However, examiner has still not received the English translated foreign priority document. Examiner has not applied prior arts for the rejection (dated between the claimed France priority date 06/22/2000 and the effective date, 6/20/2001 of this application). Applicant is requested to respond/submit the English translated foreign priority document, which would help the examiner to know whether to apply, the above-mentioned prior arts dated between 06/22/2000 and 6/20/2001, when necessary.

Drawings

4. Applicant submitted, figure 18 with "--Prior Art--" has been acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. Amended claims 1, 6 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Amended claims 1, 6 and 14 recite the limitations, "the plural terminal apparatuses", "the image", "the user". There is insufficient antecedent basis for this limitation in the claim. Since, multiple images (image and text, image among the terminal apparatuses) and multiple users (plural users, each user with image) exist in the claim, it is not clear which image and user is referred by the limitations in the claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-8 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakakibara et al. U.S. 2002/0161590 A1, Oct. 31, 2002 (Hereinafter Sakakibara) in view of

Art Unit: 2154

McNerney et al., 5,999,208 (Hereinafter McNerney), Paik, 6,370,279 and Tanno et al., 6,064,772 (Hereinafter Tanno).

8. As per claims 1 and 14 Sakakibara discloses an image distribution system in a virtual space system composed of terminal apparatuses respectively provided at plural users (e.g., figures 1, 7, 13, 21) and a server apparatus connected to the plural terminal apparatuses (e.g., figures 1, 7, 13, 21) through a communication channel for constructing a virtual space for distributing an image among the terminal apparatuses (e.g., figures 1, 7, 13, 21), wherein each terminal apparatuses comprises:

image obtaining means for obtaining the image of the user (e.g., figure 4);

transmission means for transmitting the image processed (e.g., figure 9), obtained by said image obtaining means, to said server apparatus, by each of the terminal apparatuses (e.g., figure 4),

reception display means for receiving and displaying the image transmitted from said server apparatus by each of the terminal apparatuses (e.g., figure 13);

designation means for designating the position of said virtual space (e.g., figure 7);
inputting the position of the user in the virtual space (e.g., figure 7); and

control means for controlling image processing means (e.g., figure 2) in accordance with the position of the user (e.g., figure 2).

However, Sakakibara does not specifically mention about a first virtual area to show condition of each user with image and text and a second virtual area to have a conference.

McNerney discloses the well-known concept of a first virtual area to show condition of each user with image and text (e.g., block 608, figure 4) and a second virtual area to have a conference (e.g., block 609, figure 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sakakibara with the teachings of McNerney in order to facilitate a first virtual area to show condition of each user with image and text and a second virtual area to have a conference because the first virtual area would provide information regarding each user. The image and text would help provide information for each user. The second virtual area would provide support for the conference.

Sakakibara and McNerney do not specifically mention about image compression means for compression the image with a quantization coefficient, usage of both a first quantization coefficient and a second quantization coefficient for different areas.

Paik discloses the well-known concept of image compression means for compression the image with a quantization coefficient (e.g., col., 4, lines 32 – 58, col., 2, lines 28 – 38, figures 7 and 8), usage of both a first quantization coefficient and a second quantization coefficient for different areas (e.g., col., 4, lines 32 – 58, col., 2, lines 28 – 38, figures 7 and 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sakakibara and McNerney with the teachings of Paik in order to facilitate image compression means for compression the image with a quantization coefficient, usage of both a first quantization coefficient and a second quantization coefficient for different areas because the compression would help reduce the size of the image using the

Art Unit: 2154

quantization coefficient. Having different quantization coefficients for different areas would help compressing different areas individually.

Sakakibara, McNerney and Paik do not specifically mention about one quantization coefficient being smaller than another quantization coefficient.

Tanno discloses the well-known concept of one quantization coefficient being smaller than another quantization coefficient (e.g., col., 6, lines 20 – 56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sakakibara, McNerney and Paik with the teachings of Tanno in order to facilitate one quantization coefficient being smaller than another quantization coefficient because having smaller/larger coefficient would help support different high/low frequency components for the compression. The compression would help reduce the size of the image using the quantization coefficient.

9. As per claim 2, Sakakibara, McNerney, Paik and Tanno disclose the claim limitations as rejected above. Sakakibara also discloses the following:

image compression means for compressing the image data (e.g., paragraph 79); and said control means controls the compression parameter of said compression means according to said user position in said virtual space (e.g., paragraph 79).

10. As per claim 3, Sakakibara, McNerney, Paik and Tanno disclose the claim limitations as rejected above. Sakakibara also discloses the following:

said image obtaining means includes size conversion means for converting the size of the obtained image (e.g., paragraph 125) and cut-out means for cutting out a predetermined area from the obtained image (e.g., paragraphs 28, 81); and said control means selects the output of said size conversion means or said cut-out means according to said user position in said virtual space (e.g., paragraphs 28, 81, 100, 125, 129, 143).

11. As per claim 4, Sakakibara, McNerney, Paik and Tanno disclose the claim limitations as rejected above. Sakakibara also discloses the following:

said image obtaining means includes image pickup means for converting an optical image into an electrical signal (e.g., paragraphs 28, 81, 100, 125, 129, 143); and image pickup control means for controlling an area and a direction of the image pickup of said image pickup means (e.g., paragraphs 28, 81, 100, 125, 129, 143) and said control means controls the image pickup area of said image pickup means through said image pickup control means according to the user position in the virtual space (e.g., paragraphs 28, 81, 100, 125, 129, 143).

12. As per claim 5, Sakakibara, McNerney, Paik and Tanno disclose the claim limitations as rejected above. Sakakibara also discloses the following:

said image obtaining means includes image plural image pickup means for converting an optical image into an electrical signal (e.g., paragraphs 28, 81, 100, 125, 129, 143); and said control means selects one of the outputs of said plural image pickup means according to the user position in the virtual space (e.g., paragraphs 28, 81, 100, 125, 129, 143).

Art Unit: 2154

13. As per claim 6, Sakakibara discloses a system in a virtual space system composed of terminal apparatuses respectively provided at plural users (e.g., figures 1, 7, 13, 21) and a server apparatus connected to the plural terminal apparatuses through a communication channel for constructing a virtual space for distributing an image among the terminal apparatuses (e.g., figures 1, 7, 13, 21), wherein each terminal apparatus comprises:

image obtaining means for obtaining the image of the user (e.g., figure 4);

transmission means for transmitting the image (e.g., figure 9), obtained by said image obtaining means, to said server apparatus (e.g., figure 4),

reception display means for receiving and displaying the image apparatus and transmitted from said server designation means for designating a position of the user in the virtual space (e.g., figure 13);

said server apparatus comprises: image process means for processing the image transmitted from each terminal apparatus and distribution means distributing the image (e.g., figures 1, 7, 13, 21),

distribution means for an image distribution processed by said image process means to each of said terminal apparatuses (e.g., figures 1, 7, 13, 21); and

control means for controlling image processing means (e.g., figure 2) in accordance with the position of the user (e.g., figure 2).

However, Sakakibara does not specifically mention about a first virtual area to show condition of each user with image and text and a second virtual area to have a conference.

McNerney discloses the well-known concept of a first virtual area to show condition of each user with image and text (e.g., block 608, figure 4) and a second virtual area to have a conference (e.g., block 609, figure 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sakakibara with the teachings of McNerney in order to facilitate a first virtual area to show condition of each user with image and text and a second virtual area to have a conference because the first virtual area would provide information regarding each user. The image and text would help provide information for each user. The second virtual area would provide support for the conference.

Sakakibara and McNerney do not specifically mention about image compression means for compression the image with a quantization coefficient, usage of both a first quantization coefficient and a second quantization coefficient for different areas.

Paik discloses well-known concept of image compression means for compression the image with a quantization coefficient (e.g., col., 4, lines 32 – 58, col., 2, lines 28 – 38, figures 7 and 8), usage of both a first quantization coefficient and a second quantization coefficient for different areas (e.g., col., 4, lines 32 – 58, col., 2, lines 28 – 38, figures 7 and 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sakakibara and McNerney with the teachings of Paik in order to facilitate image compression means for compression the image with a quantization coefficient, usage of both a first quantization coefficient and a second quantization coefficient for different areas because the compression would help reduce the size of the image using the

Art Unit: 2154

quantization coefficient. Having different quantization coefficients for different areas would help compressing different areas individually.

Sakakibara, McNerney and Paik do not specifically mention about one quantization coefficient being smaller than another quantization coefficient.

Tanno discloses well-known concept of one quantization coefficient being smaller than another quantization coefficient (e.g., col., 6, lines 20 – 56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sakakibara, McNerney and Paik with the teachings of Tanno in order to facilitate one quantization coefficient being smaller than another quantization coefficient because having smaller/larger coefficient would help support different high/low frequency components for the compression. The compression would help reduce the size of the image using the quantization coefficient.

14. As per claim 7, Sakakibara, McNerney, Paik and Tanno disclose the claim limitations as rejected above. Sakakibara also discloses the following:

said image process means includes recompression means for recompressing image data (e.g., paragraph 79); and said control means controls the compression parameter at the recompression according to the user position in the virtual space (e.g., paragraphs 28, 81, 100, 125, 129, 143).

15. As per claim 8, Sakakibara, McNerney, Paik and Tanno disclose the claim limitations as rejected above. Sakakibara also discloses the following:

said image obtaining means includes size conversion means for converting the size of the image and cut-out means for cutting out a predetermined area from the image (e.g., paragraph 79); and said control means selects the output of said size conversion means or said cut-out means according to the user position in the virtual space (e.g., paragraphs 28, 81, 100, 125, 129, 143).

16. As per claim 15, Sakakibara, McNerney, Paik and Tanno disclose the claim limitations as rejected above. Sakakibara also discloses the following:

said server apparatus recompress the image transmitted from each terminal apparatus with a recompression parameter (e.g., paragraph 79) according to the user position in the virtual space and distributes the image to each terminal apparatus (e.g., paragraphs 28, 81, 100, 125, 129, 143).

17. As per claim 16, Sakakibara, McNerney, Paik and Tanno disclose the claim limitations as rejected above. Sakakibara also discloses the following:

said server apparatus applies either of image size conversion and predetermined area cutting-out to the image transmitted from each terminal apparatus (e.g., paragraph 79) according to the user position in the virtual space and distributes the image to each terminal apparatus (e.g., paragraphs 28, 81, 100, 125, 129, 143).

Art Unit: 2154

Conclusion

18. The prior art made of record (forms PTO-892 and applicant provided IDS cited arts) and not relied upon is considered pertinent to applicant's disclosure.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (571) 272-3973. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2154

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Haresh Patel

June 23, 2005



JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100